

EMPLOYEE TRAINING

ROUTINE STREET & PARKING LOT SWEEPING



Photo courtesy Larry Baker and UMN

YOU HELP PROTECT OUR WATER

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CLEAN
WATER A
protects..

THE PROBLEM

- Chemicals from cars, debris, leaves and sediment on streets and parking lots can pollute our water resources when washed into storm drains and directly into lakes and rivers during heavy rains
- Large debris can block storm drains causing localized flooding



Photos courtesy of Eric Schmuttenmaer and Kitsap County Surface and Stormwater Management

THE BENEFITS

- Street sweeping is relatively cost effective
- Can remove several tons of debris a year, especially during the spring snowmelt and fall leaf drop, preventing pollution and excess nutrients from entering our waterways
- Sweeping improves road aesthetics and safety by making the surfaces less slippery in light rains
- Meets regulatory requirements



Photo Credit:
Brooklyn Park
Public Works

COST CONSIDERATIONS

- Street sweeping programs are limited by costs. The largest expenditures are on staff and equipment.
- According to a study done by Larry Baker at the UMN, street sweeping in medium-high canopy areas can typically be done for the cost of \$100 or less per lb of phosphorus.
- Use this [cost estimator](#) to look at your specific situation.



Photo from Elgin Street Sweep Products

LOW COST SOLUTIONS

- Develop a street sweeping schedule focused on removing sediment in early spring and fall
- Prioritize sweeping in areas adjacent to construction sites, or streets with medium-high tree cover
- Plan on using a sweeper for 15 years while replacing sweeping components more often.
- Communities may consider joint purchasing of a sweeper truck to reduce costs



STREET SWEEPING SCHEDULE

- An effective municipal street sweeping schedule includes, at minimum, 3x per year – after snowmelt, once in the summer, and after leaf drop.
- In the spring sweep only along the gutter-line in one pass. The American Public Works Assoc. estimates that 97% of street debris are within 40” of the curb.
- Develop a sweeping grid on paper for operators to follow and enable sweepers to make right turns most of the time – this improves performance and minimizes conflict with traffic.

PARKING POLICY

- Institute a parking policy that will increase the effectiveness of your program.
- **IMPORTANT:** a single car represents three spaces that cannot be swept since the operator must swing out and around a car and cannot get back to the curb until well past a parked vehicle.
- Therefore, establish a method of notifying residents of schedules, such as brochures, city websites and newsletters or email notifications, and use social media such as Facebook. Ask environmental groups to distribute information.
- Enforce parking regulations if possible.

MATERIALS STORAGE AND DISPOSAL

- Street sweepings often include salt, sand, leaves, chemicals and debris removed from roads and is classified as Solid Waste.
- Dispose of properly in a landfill.
 - Is it possible to compost the materials? Varies by locality.
- Municipalities that stockpile street sweepings before disposing of them much meet the requirements outlined in the management of Stockpiles



Photo from City of Bismark

RECORD KEEPING

- To evaluate the effectiveness of street sweeping programs, maintain accurate logs of the curb-miles swept and amount of waste collected.
- This information should be used to develop a written plan, schedule, and periodic reevaluation for street sweeping.
- Download the Street Sweeping planning calculator at <http://www.extension.umn.edu/environment/stormwater/pastNov13.html>

QUIZ TIME

1. What are the most effective times of year to implement a street sweeping program?

Answer: **After spring snowmelt and fall leaf drop**

2. A parked car represents how much missed curb?

Answer: **Three vehicle spaces**

3. True or False: Street sweeping is relatively cost-effective?

Answer: **True**

4. What strategy improves efficiency and decreases conflict with traffic?

Answer: **Allowing operators to take mostly right turns.**

THANKS FOR HELPING TO PROTECT
OUR WATER RESOURCES!